

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

Multiple stressor effects of ocean acidification and hypoxia on behavior, physiology, and gene expression of temperate reef fishes

**1.2. Summary description of the data:**

The Trinidad Head Line (THL) is a transect of stations extending due west from Trinidad Head (41° 3.5' N). The THL was initially established in late 2006 to provide ship-based observations of hydrographic structure and the planktonic ecosystem in coastal waters off northern California. Since 2008, sampling has been conducted approximately monthly. Sampling is conducted at up to six stations along the transect, three of which are over the shelf and three over the upper slope. Data collected include hydrographic casts at each station, which measure temperature, salinity, and a suite of ancillary parameters. Physical samples collected include water samples for assay of nutrient and chlorophyll concentrations, and net tows for zooplankton.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

Ongoing series of measurements

**1.4. Actual or planned temporal coverage of the data:**

2008 to Present

**1.5. Actual or planned geographic coverage of the data:**

Trinidad Head, California

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
Online website

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

Instrument: Hydrographic data and water samples are collected with a conductivity-temperature-depth (CTD) mounted on a rosette and augmented with ancillary sensors.

Particular instruments and configurations vary over time.

Platform: Humbolt State University R/V Coral Sea

Physical Collection / Fishing Gear: Oblique tows of a 0.71m Bongo net fitted with 505 µm mesh and 335 µm mesh to sample the upper 100 m (or within a few meters of sea floor at shallower stations). Vertical tows of a 0.5 m ring net fitted with 202 µm mesh to sample the upper 100 m (or within a few meters of sea floor at shallower stations).

Samples from 505 µm Bongo net and ring net are preserved in 5% buffered formalin in seawater. Samples from 335 µm Bongo net are preserved in ethanol.

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

Eric Bjorkstedt

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

Southwest Fisheries Science Center

**2.4. E-mail address:**

Eric.Bjorkstedt@noaa.gov

**2.5. Phone number:**

(707) 826-3688

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

Eric Bjorkstedt

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

Yes

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

Unknown

## 5. Data Lineage and Quality

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

### 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

*(describe or provide URL of description):*

Lineage Statement:

Samples are collected at sea and returned to the laboratory. Hydrographic data from vertical casts are processed following practices developed by instrument manufacturer (SeaBird Electronics) to produce data at 1 m vertical resolution. Zooplankton samples are processed under magnification by researchers to enumerate target taxa by species, and where appropriate, life history stage, sex, and size.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

### 5.2. Quality control procedures employed (describe or provide URL of description):

Data entry is checked by a second person. Checking of plankton identifications are randomly checked.

## 6. Data Documentation

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

### 6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

### 6.3. URL of metadata folder or data catalog, if known:

<https://inport.nmfs.noaa.gov/inport/item/29940>

### 6.4. Process for producing and maintaining metadata

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NMFS Data Documentation

Procedural Directive: <https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf>

## 7. Data Access

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

### 7.1. Do these data comply with the Data Access directive?

Yes

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

### 7.2. Name of organization of facility providing data access:

Southwest Fisheries Science Center

#### 7.2.1. If data hosting service is needed, please indicate:

#### 7.2.2. URL of data access service, if known:

<http://www.pacoos.org>

### 7.3. Data access methods or services offered:

contact Eric Bjorkstedt

### 7.4. Approximate delay between data collection and dissemination:

2 weeks

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

## 8. Data Preservation and Protection

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

### 8.1. Actual or planned long-term data archive location:

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

Other

**8.1.1. If World Data Center or Other, specify:**

NEIC

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

Southwest Fisheries Science Center - Eureka, CA

Humboldt State University

**8.3. Approximate delay between data collection and submission to an archive facility:**

1 month

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

Copies of data are stored in a remote location.

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*